



Hennepin Health
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Description

The COVID-19 pandemic presented Hennepin County and the world with public health and health care challenges unlike any others experienced in the past 100 years. Identifying and implementing strategies to prevent the spread or decrease the severity of COVID-19 virus has caused significant controversy among political groups, government at all levels, workforce, communities, and racial and ethnic groups. One such debate has been around the COVID-19 vaccination. Disagreements about vaccinations is not new as certain populations are opposed to childhood vaccinations, such as smallpox. Concerns about side effects, long-term effects, cost, and uncertainty around the COVID-19 vaccine efficacy are widely cited as reasons by those who would not get a COVID-19 vaccine.

Preventive screenings and childhood immunization rates are lower for Minnesota Health Care Programs (MHCP) managed care members when compared to the rates for all other Minnesota health care purchasers. In addition, racial and ethnic disparities are also noted when reviewing preventive screenings and childhood immunizations information, not only for MHCP members but also for members who have commercial or other insurance.

This focus study was established to monitor rates and racial and ethnic patterns of the COVID-19 vaccinations in the Hennepin Health population. Effectiveness of interventions used to encourage members to receive COVID-19 vaccinations will also be evaluated. By conducting this study, Hennepin Health expects to understand racial and ethnic disparities related to COVID-19 vaccination and to take appropriate steps to address those disparities. Specifically, the study was conducted to answer the questions listed below.

1. Among Hennepin Health members, are there disparities among any racial and ethnic groups in COVID-19 vaccination rates?
2. How does the COVID-19 vaccinations rates among Hennepin Health members compare to the rates in Minnesota?
3. How does the COVID-19 vaccination rates among Hennepin Health members compare to the rates among racial and ethnic groups in Minnesota?
4. What interventions to address these disparities are effective?

Process and documentation

Sample size and study methodology

This study used two data sources.

- Hennepin Health COVID-19 vaccination claims data for Hennepin Health members who had received the United States approved vaccines from Janssen, Moderna, or Pfizer with dates of service in 2021 received by December 31, 2021.

- The Minnesota Immunization Information Connection (MIIC) COVID-19 vaccination data for Hennepin Health members who had received the United States approved vaccines from Janssen, Moderna, or Pfizer with dates of service in 2021.

MIIC and Hennepin Health claims data of all eligible members for COVID-19 vaccinations were examined for 2021, so there was no sampling, and therefore no sampling methodology.

The key metrics for the study are defined below.

- Janssen, Moderna, or Pfizer COVID-19 vaccine procedure codes: claim codes – 91303, 91301, 91306, 91300, 91305 and 91307
- Race and ethnicity: The DHS enrollment data files were used to identify the race and ethnicity (Hispanic vs. non-Hispanic) for each member in the data, when available.

Vaccine equity outreach

The COVID-19 pandemic created an opportunity for Hennepin Health to connect with members in different ways. The Hennepin Health Community Outreach team and the Hennepin County Health and Human Services Community Engagement team collaborate weekly to identify potential mutual work and shared strategies. This collaborative approach resulted in new materials and videos related to the COVID-19 pandemic.

In April 2021, Hennepin Health joined DHS, MDH, the Minnesota Council of Health Plans (MCHP), and other state Managed Care Organizations providing services to Minnesota Health Care Programs (MHCP) in the COVID-19 Vaccine Equity partnership led by Dr. Nathan Chomilo, Minnesota Medicaid Medical Director to increase COVID-19 vaccination rates and reduce racial and ethnicity disparities for all MHCP members. This included the Hennepin Health PMAP, MinnesotaCare, and SNBC members.

Analysis

Data limitations

The data source and data definitions used in this study were different than the data sources and definitions used by local and state public health agencies to report rates of COVID-19 vaccination and racial and ethnicity disparities. For this reason, direct comparison of results from this study with public health reports is not possible.

The vaccination rate is calculated based on the number of individuals who have received at least one dose of the COVID-19 vaccine.

Outcomes

The COVID-19 Vaccine Equity team met every two weeks from April through August and met monthly thereafter. Strategies, successes, and barriers were discussed. Each health plan reported the vaccination rates by age and doses received every two weeks through the Red Cap Survey tool, MDH's software system. Other data reported included the number of telephonic calls, text messages sent, and transportation rides and interpreter services arranged.

This work encompassed a broad outreach strategy targeting members in zip codes with a high social vulnerability index (SVI). Communities with high SVI rates generally have higher rates of poverty, crowded housing, concentration of racial/ethnic minorities and lack of access to transportation compared to low SVI communities. High SVI communities also tend to have lower vaccination rates. Hennepin Health has approximately 26,000 members living in high SVI zip codes.

The outreach strategy was multi-pronged and included:

- Direct phone outreach to members.
- Social media posts promoting the COVID-19 vaccine events and public health reasons to demonstrate the personal and public value of the vaccine.
- Targeted communication via email and text informing members of just-in-time vaccination opportunities available in their communities.

Messaging was tailored to changing conditions as new populations become eligible and as booster shots were encouraged for a wider population. As an example, when children and adolescents became eligible for the COVID-19 vaccination, messaging changed to encourage well-child visits in hopes that an open dialogue would happen between parent, child, and health care provider. Telephone, text, and social media scripts were approved by DHS. Table 1 displays the date when the various age groups were eligible for the COVID-19 vaccine.

Table 1. Age group eligibility for COVID-19 vaccine

Age group	First date of vaccine eligibility
65+	12/11/2020
40 - 64	12/11/2020
22-39	12/11/2020
16-21	12/11/2020
12-15	5/10/2021
5-11	10/29/2021

The telephone outreach effort was deployed through an effective partnership with Hennepin County's COVID-19 Coordinated Response. Hennepin Health leveraged the county's infrastructure and maximized limited resources to reach a significant percentage of members by phone. Phone conversations provided information on vaccination, assisted members to schedule appointments and helped plan for vaccination, arranging transportation and other services. County and state incentives for receiving the vaccinations were also promoted.

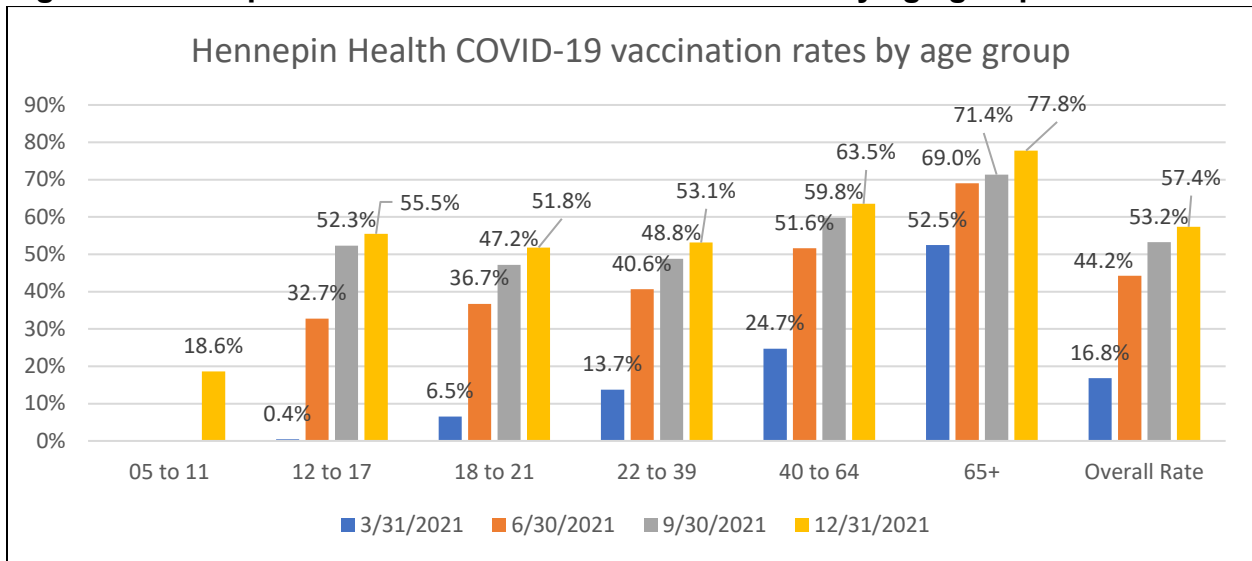
- The effort ran from June – November 2021. In that period, Hennepin Health:
- Made 37,544 phone calls reaching a total of 9,206 members.
- Sent email messages to all unvaccinated members living in high SVI zip codes, 8,556 in total.
- Sent 858 email messages to members needing their second shot.
- Sent a “return to school” text and email message to all unvaccinated members, totaling 17,989 messages.
- Sent targeted messages to members in high SVI zip codes; 10 email and text messages for 33 events to 37,889 members.
- Sent 10 targeted email and text messages to 11,009 members in other zip codes for 33 events.

The Hennepin Health COVID-19 vaccination data presented below is based on the Hennepin Health membership as of December 31, 2021. The overall vaccination rate for Hennepin Health members increased from 16.8% on March 31, 2021, to 57.4% on December 31, 2021 (Figure 1). According to the Hennepin County website, the vaccination rate for all eligible age groups as of December 31, 2021, was 70.5%¹. The state of Minnesota’s overall vaccination rate is 70.2% (defined as the percentage of individuals who have received at least one vaccine dose). The vaccination rates by age

group as of December 31, 2021, is displayed in Figure 1. Each age group saw an increase in the vaccination rates in every quarter 2021 with the age 40-64 showing the largest rate increase from 24.7% to 63.5%. The age group 5-11 became eligible for the vaccine on October 29, 2021, so only 2 months of data is available.

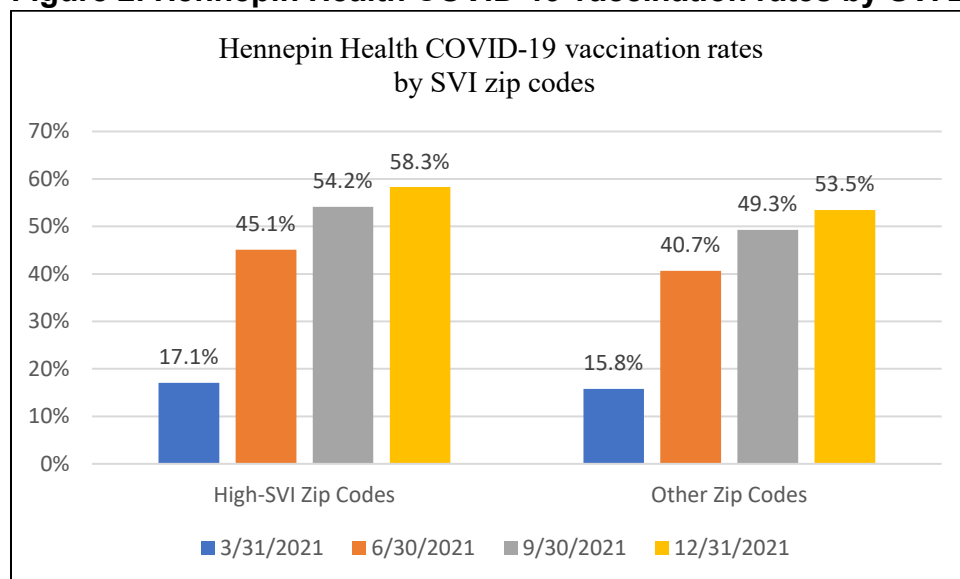
Figure 2 displays the COVID-19 vaccination rates for Hennepin Health members living in high-SVI zip codes and other zip codes. Every quarter, there was about a 5% increase in the rates by zip code areas with the members living in the high-SVI zip codes having the higher rates.

Figure 1. Hennepin Health COVID-19 vaccination rates by age group



Data source: MIIC, Hennepin Health data warehouse

Figure 2. Hennepin Health COVID-19 vaccination rates by SVI zip codes



Data source: MIIC, Hennepin Health data warehouse

Comparison to state statistics

The racial and ethnic composition of the Hennepin Health population is very different from the population of Minnesota. In addition, the Hennepin Health overall vaccination rate calculation is based on Hennepin Health's membership as of December 31, 2021, whereas the state and county use a different source as the denominator in calculating the overall vaccination rate. Despite these differences, there are some similarities in the conclusions of this study and some Minnesota reporting. All of Hennepin Health members reside in Hennepin County. The overall vaccination rate for Hennepin Health members (57.4%) is significantly lower than the overall vaccination rate of Hennepin County (70.5%) and the state of Minnesota (66.5%). Disparities continue to exist between the MHCP members and members who have other health care payer types.

In addition, racial and ethnic disparities are seen among the Hennepin Health members and Hennepin Health members and Minnesota. Black members (44.5%), Hispanics members (68.1%), and Native Americans members (56.6%) have a lower overall vaccination rate compared to the White members (70.5%) among Hennepin Health members. In the Hennepin Health membership, there is a 26% difference in the overall rate between the Black members (44.5%) and the White members (70.5%).

According to the Minnesota Department of Health data, as of December 31, 2021, racial disparities are noted between the Black residents (63.7%), Hispanic residents (67.0%) and Native American residents (57.5%) when compared to the White residents (69.3%) in the overall vaccination rate. The overall vaccination rate in the Hennepin Health White members is slightly higher (1.2%) than the White residents in the State of Minnesota.

This focus study identified racial disparities in COVID-19 vaccination rates for Hennepin Health members. In general, these disparities were also seen in data reported by the State of Minnesota. The Center for Disease Control has identified possible causes of racial and ethnic disparities for COVID-19 vaccine distribution, including factors related to discrimination, health care access and utilization, occupation, education, wealth gaps, and housing³.

Figure 3. Hennepin Health COVID-19 vaccination rates by race and ethnicity

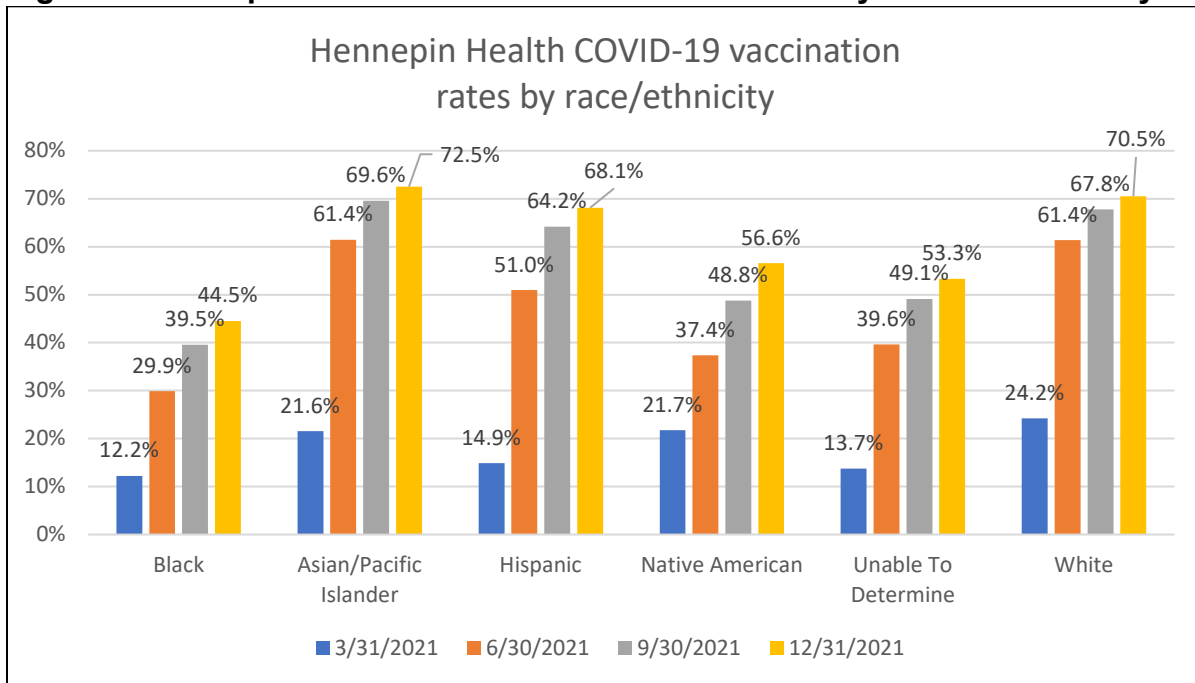
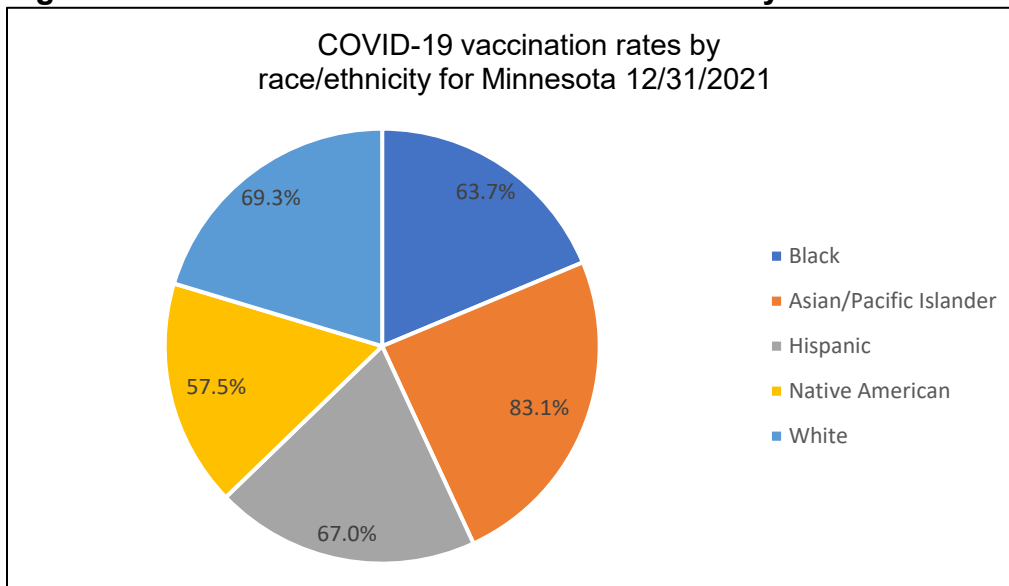


Figure 4. Minnesota COVID-19 vaccination rates by race and ethnicity



Data source: MIIC, Hennepin Health data warehouse

Recommendations and next steps

This information will be discussed with Clinical Quality Outcomes Committee, the Leadership team, other Hennepin Health departments, and the Enrollee Advisory Council. Additional interventions may be implemented. Hennepin Health will continue to participate in Vaccine Equity Partnership. Outreach and messaging to encourage members to get their COVID-19 vaccine will continue into 2022.

Additionally, Hennepin Health will monitor the progress of these efforts by routinely conducting analyses showing the racial composition of Hennepin Health member populations that receive the COVID-19 vaccination. Track health plan progress in PMAP/MinnesotaCare financial withholds.

References:

¹ Hennepin County COVID-19 public dashboard.

² Minnesota Department of Health COVID-19 Response dashboard

³ Centers for Disease Control. Health Equity Considerations and Racial and Ethnic Minority Groups.



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